

CLAIMS

1. A method of automatically analysing the structure of a software system, comprising the step of using an automated software tool to determine the dependency
5 depth level of each of several executables and to then partition the system by organising the executables into their respective dependency depth levels.
2. The method of Claim 1 in which the tool outputs a dependency table in which each of the executables is sorted according to dependency depth.
- 10 3. The method of Claim 2 in which executables with circular dependencies are placed at the same level.
4. The method of Claim 3 in which the tool assigns a dependency depth number to each executable, calculated by expanding each executable's dependency tree recursively
15 so that each executable is listed in expanded form exactly once in the tree for the right-most occurrence only, and is listed in collapsed form for all other occurrences.
5. The method of Claim 4 in which the tool is further able to determine the
20 dependency depth level of each of several components, each comprising a group of related executables with strong inter-dependencies.
6. The method of Claim 1 in which the software system is an operating system.
- 25 7. A software based tool that automatically analyses the structure of a software system, the tool programmed to determine the dependency depth level of each of several executables and to then partition the system by organising the executables into their respective dependency depth levels.
- 30 8. An operating system which is automatically analysed during its design, implementation or maintenance phases by an automated software tool that determines the dependency depth level of each of several executables and then partitions the system by organising the executables into their respective dependency depth levels.